

# Anti-Transferrin Receptor 2 Antibody

Catalog # ABO11205

#### Specification

# Anti-Transferrin Receptor 2 Antibody - Product Information

ApplicationWBPrimary AccessionQ9JKX3HostRabbitReactivityMouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Transferrin receptor protein 2(TFR2) detection. Tested with WB in Mouse:Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# Anti-Transferrin Receptor 2 Antibody - Additional Information

Gene ID 50765

**Other Names** Transferrin receptor protein 2, TfR2, Tfr2, Trfr2

Calculated MW 88402 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Mouse, Rat<br>

Subcellular Localization Cell membrane; Single-pass type II membrane protein.

**Tissue Specificity** Predominantly expressed in liver. Also expressed in kidney, spleen, brain, lung, heart and muscle with very low expression in kidney, muscle and heart.

Protein Name Transferrin receptor protein 2

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of mouse Transferrin Receptor 2(1-15aa MEQRWGLLRRVQQWS), different from the related rat sequence by one amino acid.

Purification



Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

#### Anti-Transferrin Receptor 2 Antibody - Protein Information

Name Tfr2

Synonyms Trfr2

Function

Mediates cellular uptake of transferrin-bound iron in a non- iron dependent manner. May be involved in iron metabolism, hepatocyte function and erythrocyte differentiation.

# Cellular Location

Cell membrane; Single-pass type II membrane protein

**Tissue Location** 

Predominantly expressed in liver. Also expressed in kidney, spleen, brain, lung, heart and muscle with very low expression in kidney, muscle and heart

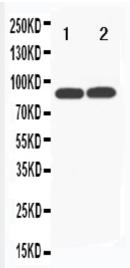
# Anti-Transferrin Receptor 2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Transferrin Receptor 2 Antibody - Images





Anti-Transferrin Receptor 2 antibody, ABO11205, Western blottingLane 1: Rat Liver Tissue LysateLane 2: Mouse Liver Tissue Lysate

# Anti-Transferrin Receptor 2 Antibody - Background

TFR2(Transferrin receptor protein 2), is a protein that in humans is encoded by the TFR2 gene. This gene is a member of the transferrin receptor-like family and encodes a single-pass type II membrane protein with a protease associated(PA) domain, an M28 peptidase domain and a transferrin receptor-like dimerization domain. By radiation hybrid analysis, Kawabata et al.(1999) mapped the TFR2 gene to chromosome 7q22.The majority of hepatic iron uptake under normal circumstances is transferrin-mediated. However, expression of TFRC in hepatocytes, as in other nonreticuloendothelial cell types, is downregulated in response to increased intracellular iron. As a consequence, TFRC expression in liver is undetectable in hereditary hemochromatosis patients with hepatic iron loading. Nonetheless, hepatic iron loading in hemochromatosis patients is progressive. Fleming et al.(2000) provided support for a mechanism that involves the uptake of transferrin-bound iron by TFR2.